

**HEWLETT PACKARD COMPANY**

Legal Department, 2080

P.O. Box 10301

Palo Alto, California 94303-0890

**PATENT APPLICATION**

#2

**IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE**

**INVENTOR(S):** Claus Skaanning

**CASE:** 10991814-1

**SUBJECT:** AUTHORIZING TOOL FOR BAYESIAN NETWORK  
TROUBLESHOOTERS


-----  
**THE ASSISTANT COMMISSIONER OF PATENTS  
WASHINGTON, D.C. 20231**

**SIR:**

**INFORMATION DISCLOSURE STATEMENT**

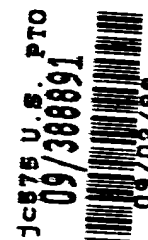
Applicant is herewith enclosing references which provide background information about Bayesian Networks and related technology. Applicants believe these references may be material to the examination of this application.

Respectfully Submitted,

By 

Douglas L. Weller  
Attorney for Applicant  
Reg. No. 30,506

Date: September 1, 1999  
Telephone: (408) 985-0642



**PATENT APPLICATION**

<b>FORM PTO-1449</b> <b>LIST OF PATENTS AND PUBLICATIONS</b> <b>FOR APPLICANT'S INFORMATION</b> <b>DISCLOSURE STATEMENT</b>  (Use several sheets if necessary)	<b>ATTY. DOCKET NO.</b> 10991814-1	<b>SERIAL NO.</b>
	<b>APPLICANT</b> Claus Skaanning	
	<b>FILING DATE</b>	<b>GROUP</b>

**REFERENCE DESIGNATION****U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS
	AA					
	BB					
	CC					
	DD					
	EE					
	FF					
	GG					
	HH					
	II					
	JJ					
	KK					

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS
	MM					
	NN					
	OO					

**OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)**

	PP	de Kleer, J. and Williams, B., "Diagnosing multiple faults" in <i>Artificial Intelligence</i> , 32:97-130 (1987)
	QQ	Heckerman, D., Breese, J., and Rommelse, K., "Decision-theoretic Troubleshooting," in <i>Communications of the ACM</i> , 38:49-57 (1995)
	RR	Lauritzen, S.L., and Spiegelhalter, D.J., "Local Computations with Probabilities on Graphical Structures and their Applications to Expert Systems," in <i>Journal of the Royal Statistical Society, Series B</i> , 50(2): 157-224 (1988)
	SS	Jensen, F.V., Lauritzen, S. L., and Olesen, K.G., "Bayesian Updating in Causal Probabilistic Networks by Local Computations," in <i>Computational Statistics Quarterly</i> , 4:269-282, (1990)

Examiner

Date Considered

**PATENT APPLICATION**

<b>FORM PTO-1449</b> <b>LIST OF PATENTS AND PUBLICATIONS</b> <b>FOR APPLICANT'S INFORMATION</b> <b>DISCLOSURE STATEMENT</b>  (Use several sheets if necessary)	<b>ATTY. DOCKET NO.</b> 10991814-1	<b>SERIAL NO.</b>
	<b>APPLICANT</b> Claus Skaanning	
	<b>FILING DATE</b>	<b>GROUP</b>

**REFERENCE DESIGNATION****U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS
	AA					
	BB					
	CC					
	DD					
	EE					
	FF					
	GG					
	HH					
	II					
	JJ					
	KK					

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS
	MM					
	NN					
	OO					

**OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)**

	PP	Breese, J.S. and Heckerman, D. "Decision-theoretic Troubleshooting: A Framework for Repair and Experiment", <i>Technical Report MSR-TR-96-06</i> , Microsoft Research, Advanced Technology Division, Microsoft Corporation, Redmond, USA (1996)
	QQ	Henrion, M., Pradhan, M., del Favero, B., Huang, K., Provan, G., and O'Rourke, P., "Why is Diagnosis using Belief Networks Insensitive to Imprecision in Probabilities?", <i>Proceedings of the Twelfth Conference on Uncertainty in Artificial Intelligence</i> , (1996)
	RR	
	SS	

Examiner

Date Considered